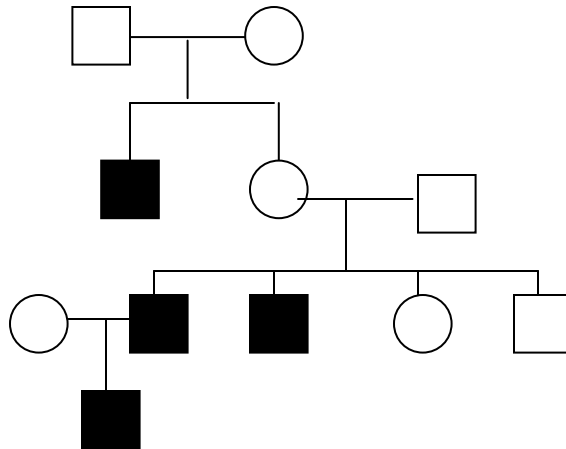


Name \_\_\_\_\_

### Sex-linked Pedigrees

Below is a pedigree tracing the inheritance of hemophilia, a recessive sex-linked disease. Use (H) for normal and (h) for hemophilia as the alleles on each X and Y chromosome.



1. Label the genotype of each individual. The first one has been done for you.

A  $X^H Y$

B \_\_\_\_\_

C \_\_\_\_\_

D \_\_\_\_\_

E \_\_\_\_\_

F \_\_\_\_\_

G \_\_\_\_\_

H \_\_\_\_\_

I \_\_\_\_\_ OR \_\_\_\_\_

J \_\_\_\_\_

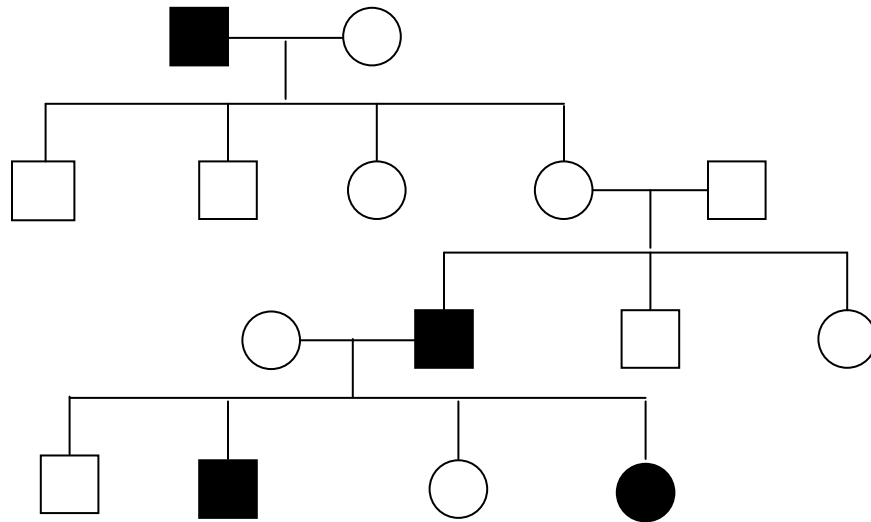
K \_\_\_\_\_

2. Why do sex-linked defects occur more frequently in males?

3. Why are there 2 options for the genotype of individual I?

4. Which individuals above are considered carriers? (use their letter)

Below is a pedigree tracing the inheritance of colorblindness, a recessive sex-linked trait. Use (N) for normal and (n) for colorblind as the alleles on each X and Y chromosome.



5. Give the genotypes of the labeled individuals.

A _____	B _____	C _____
D _____	E _____	F _____
G _____	H _____	I _____
J _____	K _____	

6. Is it possible for a normal male and a normal female to have a child who is colorblind? Explain why or why not.

7. Colorblind males have to get the recessive allele from their \_\_\_\_\_.  
(choose mother or father)

NOTE: A normal male CANNOT have a colorblind daughter.